

Konform® SR

Product# CTSR-12, CTSR-P, CTSR1, CTSR5, CTSR-MV5, CTSR-HV1

Product Description

Konform SR provides maximum flexibility for extreme temperatures. This transparent coating provides ideal protection for both rigid and flexible printed circuit boards. Cured coatings are hydrolytically stable and retain their physical electrical properties after high temperature and humidity exposure. Konform SR will not stress delicate circuit components.

- Extends component life by protecting against adverse environments
- Good insulation properties, excellent flexibility
- Resists moisture, salt, fungus, corrosive vapors, and severe environments
- Engineered to withstand heat generated by electronic circuitry as well as climatic temperatures
- Contains a UV indicator for Quality Control inspection using medium intensity light at 265-335 nm
- UL Recognized, File QMJU2.E76307
- Compliant to IPC-CC-830A
- RoHS compliant

Typical Applications

Konform SR is ideal for applications in:

- Aerospace
- Data Communications
- Instrumentation
- Automotive Manufacturing
- Marine Manufacturing
- Process Control



Typical Product Data and Physical Properties

| | | |
|---|--|-------------|
| Usable Temp. Range of Cured Coatings | -85°F to 390°F (-65°C to 200°C) | |
| Tack Free Time | 15 min. | |
| Curing Conditions: Full Cure (@30-60% R.H.) | 24 Hours @ 77°F (25°C) 8 Hours @ 170°F (77°C) | |
| Quick Cure | 10 min. @RT followed by 10 min @ 80°C | |
| Specific Gravity (water = 1 @ 68°F) | 0.78 (Liquid Only) | |
| Viscosity (cps @ 77°F) | CTSR | 40 ± 5 cps |
| | CTSR-MV | 60 ± 5 cps |
| | CTSR-HV | 120 ± 5 cps |
| Flash Point (TCC) | 60°F / -15.6°C | |
| Volume Resistivity (ohm/cm) | 1.5 x 10 ¹⁶ | |
| Dielectric Breakdown (volts/mil) | 1100 | |
| Thermal Conductivity (Cal-cm/sec-cm ² -°C) | 2.9 x 10 ⁻⁴ | |
| Coefficient of Thermal Expansion (in/in/°C) | 2.1 x 10 ⁻⁴ | |
| Coverage (1 mil/ft ²) | CTSR-12 | 21 |
| | CTSR1 | 251 |
| | CTSR-MV5 | 479 |
| | CTSR-HV1 (2 mil) | 719 |
| Shelflife | 1 year from date of manufacture | |
| RoHS Compliant | Yes | |

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Compatibility

Konform SR is generally compatible with most materials found on printed circuit boards. As with any chemical product, product/component compatibility must be determined on a non-critical area prior to use.

Performance

| | |
|----------------------------|-----------|
| Moisture Resistance | Excellent |
| Removability | Excellent |
| Ease of Repair | Excellent |
| Flexibility | Excellent |
| Adhesion | Excellent |
| Abrasion Resistance | Fair |
| Solvent Resistance | Good |

Usage Instructions

For industrial use only. Read SDS carefully prior to use.

Before applying Konform SR conformal coatings, clean circuit boards to remove contamination and allow to dry. Cleaning may be performed with Chemtronics Flux-Off products.

SPRAY APPLICATION: Apply top to bottom, allowing coating to flow evenly around components. Rotate PCB 90° and repeat application. Rotate and apply coating two additional times, then allow board to cure. If additional thickness is desired, apply additional coatings. When using liquid spray with automatic dispensing equipment, adjustments may be required in application rate and viscosity.

DIP APPLICATION: Using automatic equipment or hand immersion technique, slowly immerse PCB into the coating and remove slowly. Use an average rate of approximately 1 foot per minute. After allowing the board to cure, process may be repeated to achieve desired thickness.

BRUSH APPLICATIONS: Evenly apply coating to areas desired at thickness required. Allow time for curing before reapplying to achieve a thick coating. Use Chemask to protect components during conformal coating process.

REMOVAL: After application, cured Konform SR may be removed by soaking in Chemtronics Electro-Wash Two Step.

Availability

| | |
|-----------------|---------------------------|
| CTSR-12 | 10 oz. / 283 g Aerosol |
| CTSR-P | 16 fl. oz. / 473ml Liquid |
| CTSR1 | 1 Gal / 3.7 L Liquid |
| CTSR5 | 5 Gal / 19 L Liquid |
| CTSR-MV5 | 5 Gal / 19 L Liquid |
| CTSR-HV1 | 1 Gal / 3.7 L Liquid |

Environmental Impact Data

| | |
|----------|--------|
| CFC | 0.0% |
| HCFC | 0.0% |
| CL Solv. | 0.0% |
| VOC | 88.0 % |
| HFC | 0.0% |
| ODP | 0.00 |

CFC, HCFC, CL. SOLV., VOC, and HFC numbers shown are the content by weight. Ozone depletion potential (ODP) is determined in accordance with the Montreal Protocol and U.S. Clean Air Act of 1990. The ODP of this product is 0.0. It is the sum of the ODP of the substances that may contribute to the depletion of stratospheric ozone, based upon the weight of each substance in the product's formulation.

Technical and Application Assistance

Chemtronics provides a technical hotline to answer your technical and application related questions.

The toll free number is: 1-800-TECH-401.

Note:

This information is believed to be accurate. It is intended for professional end users having the skills to evaluate and use the data properly. CHEMTRONICS does not guarantee the accuracy of the data and assumes no liability in connection with damages incurred while using it.